CW#128a: Rich Task

Geometry  
Due: In Class, Wednesday May 18th

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ TP:\_\_\_\_\_

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| 1. Triangles *ABC* and *PQR* are shown below in the coordinate plane. ../../../../../Desktop/Screen%20Shot%202016-05-15%20at%209.37.56%20AM 2. Show that Δ*ABC* is congruent to Δ*PQR* with a reflection followed by a translation. 3. If you reverse the order of your reflection and translation, will Δ*ABC* still be congruent to Δ*PQR*? 4. Find a second way, different from your work in part (a), to map Δ*ABC* to Δ*PQR* using translation, rotations, and/or reflections. |

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| 1. ../../../../../Desktop/Screen%20Shot%202016-05-15%20at%209.48.36%20AM%2  The six outer circles though the one in the center and each circle on the outside also touches its two neighbors in the outside ring. Find as many transformations in the coordinate plane as you can which are symmetries of this configuration of circles. (NOTE: There you can you two or three step transformations, for example, a reflection then a rotation.) |

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| Criteria | Yes?  🖒 | Almost? | No?  🖓 |
| Use multiple representations   * Mathematical domain (VANG) of question is identified. * Mathematical domain (VANG) of answer is identified. * At least a third representation is present. |  |  |  |
| Connect to prior knowledge   * Giving relevant definitions or properties of math concepts. * Adding “NOT”s * Wrong answers are used as bounds for the problem. |  |  |  |
| Why > How > What   * Claim (what) is given with specific nouns used (no “it”, “this”, “those”) * Evidence (how) is present * Reasoning (why) ties together evidence, prior knowledge, and multiple representations. |  |  |  |

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